Please amend the claims as follows:

- 1-13. Cancelled.
- 14. (Previously Presented) A method for preparing dispersions of calcium phosphate platelets, wherein the length of the platelets, L, is between 5 and 500 nm and the thickness of the platelets is between 0.5 and 20 nm, and at least one polymer which complexes calcium comprising the steps of:
 - i) preparing a solution of calcium salts; and adjusting the pH to a selected value of between 4 and 6;
 - ii) adding a phosphate solution to the solution obtained in step i) over a period of time of between 30 minutes and 4 hours, so as to obtain a calcium to phosphorus molar ratio of between 1 and 2.5, wherein the pH is maintained constant at the selected value of between 4 and 6 until a calcium phosphate platelet dispersion is formed:
 - iii) heat treating the dispersion obtained in step ii) at a temperature of between 50°C and 95°C;
 - iv) washing the dispersion obtained in step iii);
 - v) adding a dispersion agent to the dispersion obtained in step iv);
 - vi) separating the colloidal dispersion obtained in step v);

wherein in at least one of steps i) or ii), the solutions further comprise ammonium ions; and wherein at least one polymer which complexes calcium is added during step i) or ii).

- 15. (Previously Presented) The method according to claim 14, wherein the calcium solution is a CaCl₂ or Ca(NO₃)₂ solution.
- 16. (Previously Presented) The method according to claim 14, wherein the concentration of the calcium solution is between 0.25M and 2.5M.

- 17. (Previously Presented) The method according to claim 14, wherein the phosphate salt solution is a solution of one of ammonium phosphate or sodium phosphate.
- 18. (Previously Presented) The method according to claim 14, wherein the calcium to phosphorus molar ratio in the solution of step ii is between 1.3 and 1.7.
- 19. (Previously Presented) The method according to claim 14, wherein the temperature of the heat treatment in step iii) is between 60°C and 90°C.
 - 20. (Cancelled)